

# A CONFIGURABLE MULTI-POINT SAMPLING METHOD AND SYSTEM FOR REPRESENTATIVE GAS COMPOSITION MEASUREMENTS IN A STRATIFIED GAS FLOW STREAM

## Abstract

A method and system of obtaining a sample of fluid flowing through a duct comprises determining an average concentration of a component species of the fluid during a test including determining first and second concentrations of the component species at first and second respective duct locations, positioning first and second sample probes in the duct so that they receive the fluid at the first and second locations, respectively, and controlling respective flow rates of fluid received by the first and second sample probes, or alternatively first and second time amounts that the flow of fluid is received by the first and second sample probes, respectively, based on the determined first, second and average concentrations. The respective flow rates or time amounts may be controlled so that component species concentration collectively

received by the first and second sample probes equals the average concentration of the component species determined during the test.